

Notice of Allowability

Application No.

10/619,782

Examiner

Michael W. Talbot

Applicant(s)

TUCKER, BRADLEY J.

Art Unit

3722

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 20 March 2006.
2. ☒ The allowed claim(s) is/are 1-22.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>06/19/06</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Kit M. Stetina on Monday, 19 June 2006.

The application has been amended as follows:

(1) claim 5, line 2, the character reference "the modifier" was changed to --the drill--.

2. The following is an examiner's statement of reasons for allowance:

Claims 1-22 are allowed.

Claims 1,2,17,and 21 are the independent claims.

3. Regarding claim 1, the prior art of record fails to anticipate or make obvious a lever mechanically attached to both a drill linkage system and a clamp linkage system for mechanically exerting force to vertically transverse both a drill and a clamp such that a clamp downward force is mechanically increased relative to an increasing drill upward force, solely or in combination, with a bed for receiving the work piece, the drill disposed below the bed and attached to the drill linkage system and the clamp disposed above the bed and attached to the clamp linkage system.

Stelz '759 is the closest art of record.

Stelz '759 shows in Figures 1 and 2 a reaming machine for boring holes in a bottom side of a work piece (D) comprising a bed (5) for receiving the work piece, a drill (9) disposed below the bed and vertically traversable there under for working the bottom side of a work piece, a clamp (22) disposed above the bed and vertically traversable there above for fixing a spatial

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relationship between the bed and the work piece, a drill linkage system (53,52,51,17,16,10) attached to drill, a clamp linkage system (53,59,58a,37,36,35,32,31,30,29,25) attached to the clamp, and a lever (58,56,54) attached to the drill and clamp linkage systems.

Stelz '759 still lacks the clamp downward force being mechanically increased relative to an increasing drill upward force. Even though the clamp downward force and drill upward forces are mechanically controlled through the compressed air/cylinder structure, the forces are generated independently with respect to one another and therefore, there is no motivation to modify Stelz '759 to include the necessary structure to achieve a clamp downward force resulting directly from a drill upward force since this specific relationship would result only from the knowledge gained from Applicant's disclosure.

4. Regarding claim 2, the prior art of record fails to anticipate or make obvious a lever attached to both a drill linkage system and a clamp linkage system such that a clamp downward force is mechanically and proportionally adjusted with respect to a drill upward force, and wherein the lever defines a drill pivot, a clamp pivot and a pedal portion such that the lever is rotateable about the drill pivot and the a clamp pivot is vertically transversable and interposed between the drill pivot and the pedal portion, solely or in combination, with a bed for receiving the work piece, a drill disposed below the bed and attached to the drill linkage system and a clamp disposed above the bed and attached to the clamp linkage system.

Stelz '759 is the closest art of record.

Stelz '759 shows in Figures 1 and 2 a reaming machine for boring holes in a bottom side of a work piece (D) comprising a bed (5) for receiving the work piece, a drill (9) disposed below the bed and vertically traversable there under for working the bottom side of a work piece, a clamp (22) disposed above the bed and vertically traversable there above for fixing a spatial relationship between the bed and the work piece, a drill linkage system (53,52,51,17,16,10)

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attached to drill, a clamp linkage system (53,59,58a,37,36,35,32,31,30,29,25) attached to the clamp, and a lever (58,56,54) attached to the drill and clamp linkage systems.

Stelz '759 still lacks the clamp downward force being mechanically and proportionally adjusted with respect to the drill upward force and the lever comprising a drill pivot, a clamp pivot and a pedal portion. Even though the clamp downward force and drill upward forces are mechanically controlled through the compressed air/cylinder structure, the forces are generated independently with respect to one another and therefore, there is no motivation to modify Stelz '759 to include the necessary structure, along with a lever having a drill pivot, a clamp pivot and a pedal portion, to achieve a clamp downward force resulting directly from a drill upward force since this specific relationship would result only from the knowledge gained from Applicant's disclosure.

5. Regarding claim 17, the prior art of record fails to anticipate or make obvious a lever rotateably attached to both a drill linkage system and a clamp linkage system for self adjusting a clamp downward force with respect to a drill upward force, solely or in combination, with a bed for receiving the work piece, a drill disposed below the bed and attached to the drill linkage system and a clamp disposed above the bed and attached to the clamp linkage system.

Stelz '759 is the closest art of record.

Stelz '759 shows in Figures 1 and 2 a reaming machine for boring holes in a bottom side of a work piece (D) comprising a bed (5) for receiving the work piece, a drill (9) disposed below the bed and vertically traversable there under for working the bottom side of a work piece, a clamp (22) disposed above the bed and vertically traversable there above for fixing a spatial relationship between the bed and the work piece, a drill linkage system (53,52,51,17,16,10) attached to drill, a clamp linkage system (53,59,58a,37,36,35,32,31,30,29,25) attached to the clamp, and a lever (58,56,54) attached to the drill and clamp linkage systems.

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Stelz '759 still lacks the lever being rotateable attached and the clamp downward force being self-adjusting with respect to the drill upward force. Even though the clamp downward force and drill upward forces are mechanically controlled through the compressed air/cylinder structure, the forces are generated independently with respect to one another and therefore, there is no motivation to modify Stelz '759 to include the necessary structure to achieve a clamp downward force resulting directly from a drill upward force since this specific relationship would result only from the knowledge gained from Applicant's disclosure.

6. Regarding claim 21, the prior art of record fails to anticipate or make obvious a method for boring holes in a bottom side of a work piece comprising the step of: (d) upon contact of the drill to the work piece, transferring a force exerted on the drill by the work piece to the clamp through the lever such that the clamp downward force is increased as the drill upward force is increased, solely or in combination, with the steps of (a) providing a bed for receiving the work piece, a drill disposed below the bed and attached to the drill linkage system and a clamp disposed above the bed and attached to the clamp linkage system, (b) actuating the clamp via the lever for applying the clamp downward force on the work piece and (c) after actuating the clamp, actuating the drill via the lever for vertically raising the drill toward the work piece.

Stelz '759 is the closest art of record.

Stelz '759 shows in Figures 1 and 2 a reaming machine for boring holes in a bottom side of a work piece (D) comprising a bed (5) for receiving the work piece, a drill (9) disposed below the bed and vertically traversable there under for working the bottom side of a work piece, a clamp (22) disposed above the bed and vertically traversable there above for fixing a spatial relationship between the bed and the work piece, a drill linkage system (53,52,51,17,16,10) attached to drill, a clamp linkage system (53,59,58a,37,36,35,32,31,30,29,25) attached to the clamp, and a lever (58,56,54) attached to the drill and clamp linkage systems.

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Stelz '759 still lacks the specific method steps recited above. There is no motivation to modify Stelz '759 to include the specific method steps to achieve a clamp downward force resulting directly from a drill upward force since these specific method steps would result only from the knowledge gained from Applicant's disclosure.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

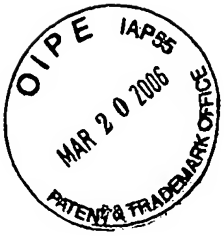
7. Any inquiry concerning the content of this communication from the examiner should be directed to Michael W. Talbot, whose telephone number is 571-272-4481. The examiner's office hours are typically 8:30am until 5:00pm, Monday through Friday. The examiner's supervisor, Mrs. Monica S. Carter, may be reached at 571-272-4475.

In order to reduce pendency and avoid potential delays, group 3720 is encouraging FAXing of responses to Office Actions directly into the Group at FAX number 571-273-8300. This practice may be used for filing papers not requiring a fee. It may also be used for filing papers, which require a fee, by applicants who authorize charges to a USPTO deposit account. Please identify Examiner Michael W. Talbot of Art Unit 3722 at the top of your cover sheet.



MWT
Examiner
19 June 2006


MONICA CARTER
SUPERVISORY PATENT EXAMINER



ENTER MAR 6/2/06

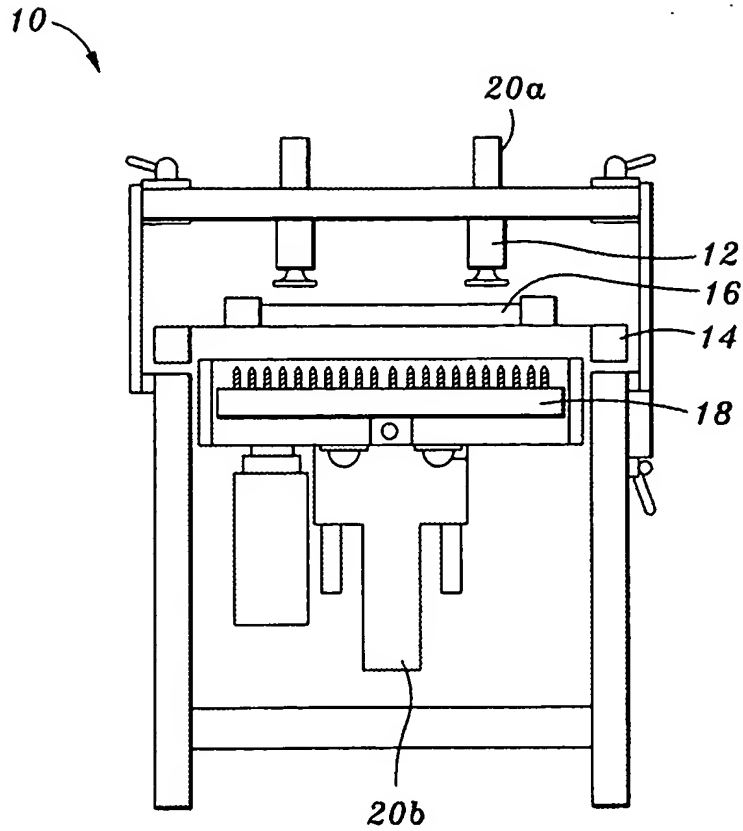
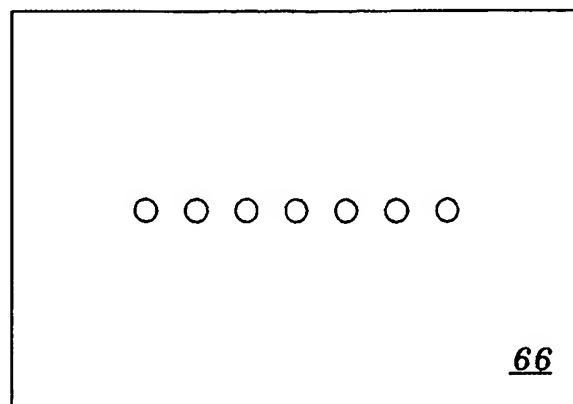
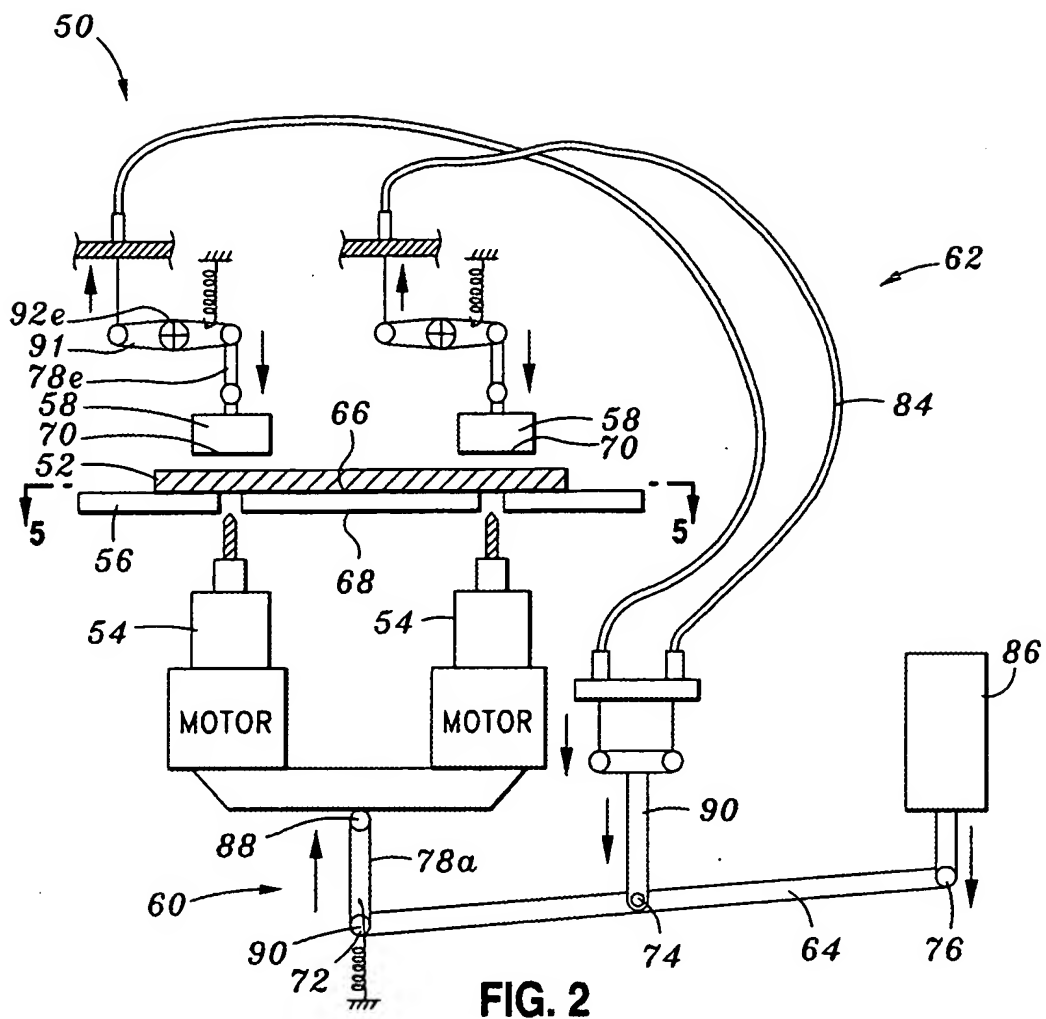


FIG. 1
(PRIOR ART)

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The diagram illustrates a mechanical assembly with the following components and labels:

- 60**: The main base or support structure.
- 64**: A horizontal member or track at the base.
- 74**: A vertical support post.
- 78a**: A joint or pivot point at the base of the vertical support.
- 78b**: A vertical member extending upwards from the base.
- 78c**: A horizontal member or arm extending from the vertical support.
- 80a**: A component, possibly a handle or lever, attached to the horizontal arm.
- 80b**: A component, possibly a handle or lever, attached to the horizontal arm.
- 86**: A rectangular component, possibly a display or control unit, mounted on the base.
- 88**: A component, possibly a handle or lever, attached to the base.
- 90**: A joint or pivot point at the base of the horizontal member.
- 92a**: A joint or pivot point on the vertical support.
- 92b**: A joint or pivot point on the horizontal arm.
- 94**: A component, possibly a handle or lever, attached to the vertical support.
- 96**: A component, possibly a handle or lever, attached to the horizontal arm.
- 98**: A component, possibly a handle or lever, attached to the horizontal arm.
- 100**: A component, possibly a handle or lever, attached to the horizontal arm.
- 62**: An arrow indicating a direction of movement or force.

FIG. 3

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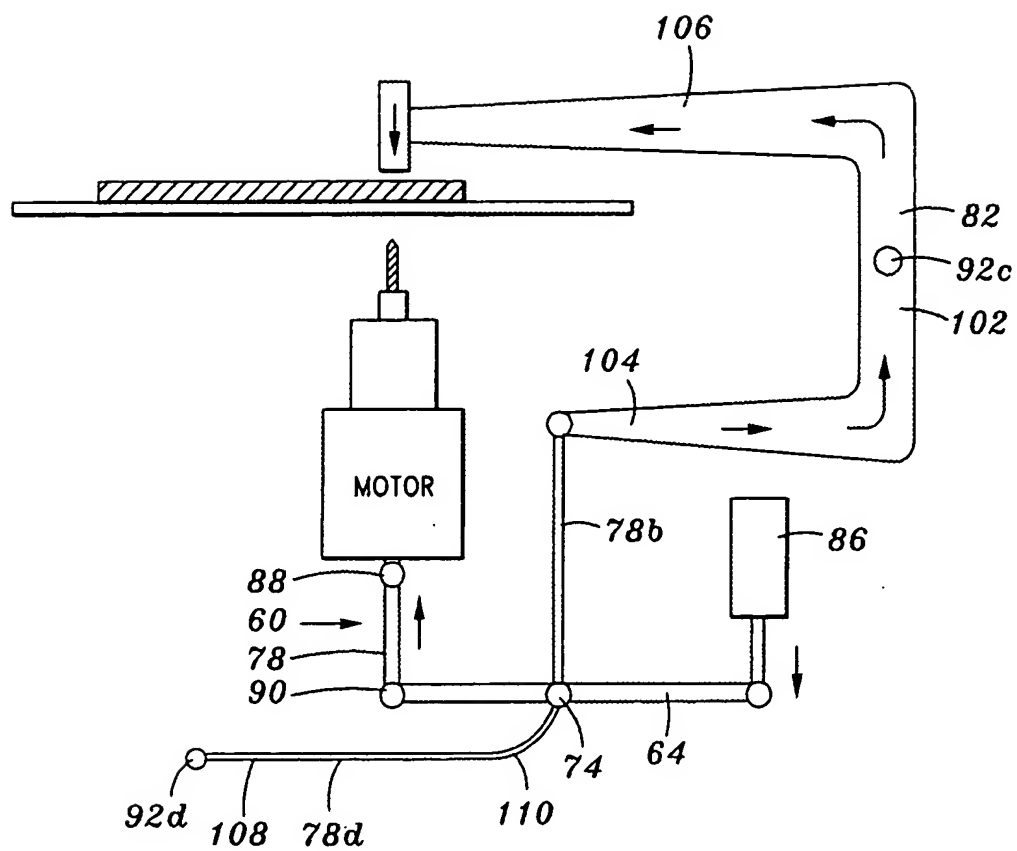


FIG. 4